

The last section deals with the "Association of Species in Natural Vegetation," and gives a descriptive sketch of North American plants under nine "floras" and a short though useful bibliography. In the middle of the book is a rather detached chapter on "Preparation and Preservation of Plant Specimens." The appendix includes a guide to favorable collecting seasons in different parts of the continent and a useful glossary.

The volume, despite its many excellent features, is difficult to sum up. The stressing of keys, identification, groupings, taxonomic hierarchy, descriptions, and collection of specimens definitely places emphasis on the *materials* of taxonomy. The arrangement of major groups, despite the chapter on evolution and that on the basis for the author's preferred system, suggests that convenience takes priority over the operations of those biological phenomena which make patterns of diversity inevitable and classification feasible. The book is designed as an elementary text for college students "*without prerequisite*," and is based on the view that the path to an appreciation of the world of plants lies primarily through learning their names and positions.—LINCOLN CONSTANCE, Department of Botany, University of California, Berkeley.

The Mushroom Hunter's Field Guide. By ALEXANDER H. SMITH. 197 pp., 1 figure, 124 photographs. 1958. University of Michigan Press, Ann Arbor. \$4.95.

In his introduction, Dr. Smith states that since he is concerned with mushrooms most easily identified by their pictures, illustrations are the backbone of this handbook; for each species illustrated, he includes a discussion of the important field characters rather than a formal description of the species characters. In making this book a field guide, he adds that he has sacrificed scientific accuracy, but he has pointed out in the text where it can be attained. His intention has been to illustrate the mushrooms in such a way as to enable accurate recognition and emphasize the critical characters.

In my opinion, Dr. Smith has achieved his purpose—that is, to write a field guide that would enable mushroom hunters to make accurate identifications and protect them against serious errors—more completely than one could have expected in a book of this size and simplicity. No knowledge of botany is required in order to use this guide; all that is necessary is careful observation and caution in collecting, as well as compliance with Dr. Smith's recommendations to discard all specimens that do not completely fit the descriptions and to exercise care in cooking and eating. This is a handbook that can be recommended without any hesitation and without cautionary advice to the amateur collector, since the author enumerates clearly all the dangers involved in the gathering of mushrooms for the table. The book is a good size and shape for use in the field. The photographs are excellent.

The book is intended for the Great Lakes region, northeastern United States and western United States. It includes a list of fifteen species considered safe for beginners, a list of species associated with certain trees, and a seasonal list of common mushrooms. Although only about one in thirty species in the United States is included, most of the common mushrooms, the finest of the edible species, and the most dangerous of the poisonous species are discussed and illustrated. In addition, the guide includes some of the mushrooms that are poisonous only to certain people. The introductory section includes a brief account of the role of fungi in the breakdown of organic substances, their manner of growth, nutritional and moisture requirements, and mycorrhizal relationships. The structure of fleshy fungi is also discussed, as well as variation in form, precautions to take in collecting, and the nature of Latin binomial names. Instructions are given in the use of the simplified key; a glossary and a short bibliography are also included.—ISABELLE I. TAVARES, Department of Botany, University of California, Berkeley.